

# **EQUILIBRIUM BASED VERTICAL SYNC PHASE LOCK LOOP FOR VIDEO DECODER**

## **ABSTRACT**

**[049]** The present invention discloses a PLL (90), which may be implemented in software, hardware, or a combination of software and hardware, which comprises a sync detector (92), a loop filter (94), a vertical sync discrete time oscillator (DTO) (98), and an output logic (100) adapted to detect a vertical sync (222), wherein the loop filter (94), the vertical sync DTO (98), and the output logic (100) are coupled to the sync detector (92).